

What is claimed is:

1. A system for cleaning a contaminated matter comprising dioxins by decomposing the dioxins in the contaminated matter, wherein the system comprises a reaction tank holding at least:

at least one of crushed cells and fractions of the crushed cells comprising a pellicle of *Bacillus midousuji* cultured in the presence of a chlorinated aromatic compound which has a substituent comprising an oxygen atom bonded to an aromatic ring and having a chloro group bonded to an aromatic ring;

the contaminated matter; and  
an aqueous medium.

2. The system according to claim 1, wherein the system comprises a filtration means for separating the aqueous medium and a solid matter from a matter held in the reaction tank to remove the aqueous medium.

3. The system according to claim 1, wherein the system comprises:

a seclusion means for secluding a source of the contaminated matter;

a fluid production means for producing a fluid comprising the contaminated matter by soaking the contaminated matter from the source of the contaminated

matter in at least water; and

a fluid transport means for transporting the fluid comprising the contaminated matter toward the reaction tank.

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4. The system according to claim 2, wherein the system comprises:

a seclusion means for secluding a source of the contaminated matter;

10 a fluid production means for producing a fluid comprising the contaminated matter by soaking the contaminated matter from the source of the contaminated matter in at least water; and

15 a fluid transport means for transporting the fluid comprising the contaminated matter toward the reaction tank.

20 5. The system according to claim 3, wherein the fluid production means is a means of washing the contaminated matter for washing the contaminated matter down by jetting at least water to the source of the contaminated matter.

25 6. The system according to claim 4, wherein the fluid production means is a means of washing the contaminated matter for washing the contaminated matter down by jetting at least water to the source of the contaminated matter.

7. A method of cleaning a contaminated matter comprising dioxins by decomposing the dioxins in the contaminated matter, wherein the method comprises:

5 mixing at least one of crushed cells and fractions of the crushed cells comprising a pellicle of *Bacillus midousuji* cultured in the presence of a chlorinated aromatic compound which has a substituent comprising an oxygen atom bonded to an aromatic ring and having a chloro group bonded to an aromatic ring, the contaminated matter,  
10 and an aqueous medium.

8. The method according to claim 7, wherein the method comprises:

15 separating a solid matter and the aqueous medium from the mixture to obtain the aqueous medium in which the solid matter is removed.

9. The method according to claim 7, wherein the method comprises:

20 secluding a source of the contaminated matter;  
soaking the contaminated matter generated from the secluded source of the contaminated matter in water; and  
mixing at least one of the crushed cells and the fractions of the crushed cells with the water comprising  
25 the contaminated matter.

10. The method according to claim 8, wherein the

method comprises:

secluding a source of the contaminated matter;

soaking the contaminated matter generated from the  
secluded source of the contaminated matter in water; and

5        mixing at least one of the crushed cells and the  
fractions of the crushed cells with the water comprising  
the contaminated matter.

10        11. The method according to claim 9, wherein at least  
one of the crushed cells and the fractions of the crushed  
cells are mixed with water slurry comprising the  
contaminated matter discharged through one method of a high  
pressure water washing method for washing the contaminated  
matter down by jetting water under high pressure to the  
15        source of the contaminated matter and a wet sandblast method  
for washing the contaminated matter down by jetting water  
and abrasive grains under high pressure to the source of  
the contaminated matter.

20        12. The method according to claim 10, wherein at least  
one of the crushed cells and the fractions of the crushed  
cells are mixed with water slurry comprising the  
contaminated matter discharged through one method of a high  
pressure water washing method for washing the contaminated  
25        matter down by jetting water under high pressure to the  
source of the contaminated matter and a wet sandblast method  
for washing the contaminated matter down by jetting water

and abrasive grains under high pressure to the source of the contaminated matter.

13. A preparation for decomposing dioxins,  
5 comprising at least one of crushed cells and fractions of  
the crushed cells which comprise a pellicle of *Bacillus*  
*midousuji* cultured in the presence of a chlorinated  
aromatic compound having a substituent comprising an oxygen  
atom bonded to an aromatic ring and having a chloro group  
10 bonded to an aromatic ring.